AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (currently amended) A method of screening for a compound that modulates viral assembly and maturation comprising the steps of:

maintaining ~~viral structural protein in a soluble form~~ an HIV-1 capsid protein in a solution;

rapidly increasing salt concentration in said solution in the presence of a candidate compound or a control compound, wherein said HIV-1 capsid protein is capable of self-assembling upon said salt concentration increase in the presence of said control compound but not said candidate compound; and ~~triggering assembly of said viral structural protein;~~

~~contacting said viral structural protein with a candidate compound or a control compound that does not inhibit viral assembly; and~~

monitoring ~~viral~~ assembly of said HIV-1 capsid protein in the presence of said candidate compound, wherein an increase or decrease of ~~viral~~ assembly of said HIV-1 capsid protein in the presence of said candidate compound compared to said control compound indicates said candidate compound promotes or inhibits ~~viral~~ HIV-1 assembly respectively.

2. (canceled)

3. (canceled)

4. (currently amended) The method of claim 1 , wherein said ~~viral structural~~ HIV-1 capsid protein is maintained in a soluble form through the use of an anti-aggregation agent.

5. (canceled)

6. (canceled)

7 (previously presented) The method of claim 4, wherein said anti-aggregation agent is GuHCl.

8. (original) The method of claim 7, wherein said GuHCl is in a concentration of from about 1 M to about 6 M.

9. (canceled)

10. (canceled)

11. (currently amended) The method of claim 1 ~~claim 3~~, wherein said candidate compound is selected from the group consisting of protein, peptide derived from the HIV-1

Gag polyprotein and a non-peptide small molecule.

12. (currently amended) The method of claim 1, wherein said monitoring of ~~viral~~ HIV-1 capsid protein assembly is by a method selected from the group consisting of measuring turbidity, measuring fluorescence and physical separation of the polymerized viral protein.

13-18. (canceled)

19. (new) A method of screening for agents capable of inhibiting HIV assembly or maturation, said method comprising:

providing a polypeptide in a soluble form, said polypeptide comprising an HIV capsid protein;

diluting said polypeptide in a salt solution in the presence of a molecule of interest, wherein said polypeptide is capable of self-assembling upon dilution in said salt solution in the absence of said molecule of interest; and

monitoring assembly of said polypeptide in the presence of said molecule of interest,

wherein a decrease in the assembly of said polypeptide in the presence of said molecule of interest as compared to that in the absence of said molecule indicates that said molecule is capable of inhibiting HIV assembly or maturation.

20. (new) The method of claim 19, wherein said salt solution comprises at least 1 M NaCl.

21. (new) The method of claim 20, wherein said polypeptide consists essentially of the HIV capsid protein.

22. (new) The method of claim 20, wherein said polypeptide is maintained in a solution comprising from about 1 M to about 6 M GuHCl before said diluting.

23. (new) A method of screening for agents capable of inhibiting HIV assembly or maturation, said method comprising:

providing a polypeptide in a soluble form, said polypeptide comprising an HIV capsid protein;

rapidly mixing said polypeptide with a salt solution in the presence of a molecule of interest, wherein said mixing is capable of triggering assembly of said polypeptide in the absence of said molecule of interest; and

monitoring assembly of said polypeptide in the presence of said molecule of interest,

wherein a decrease in the assembly of said diluted polypeptide in the presence of said molecule of interest as compared to that in the absence of said molecule indicates that said molecule is capable of inhibiting HIV assembly or maturation.

24. (new) The method of claim 23, wherein the salt solution comprises at least 1 M NaCl, and said polypeptide is maintained in a solution comprising from about 1 M to about 6 M GuHCl before said mixing.